

**I. Romance of the Flora
of New Zealand.**

NEW ZEALAND COLLECTION

**II. Farthest North in
New Zealand—
A Memorable Tour.**

By

SIR GEORGE FENWICK

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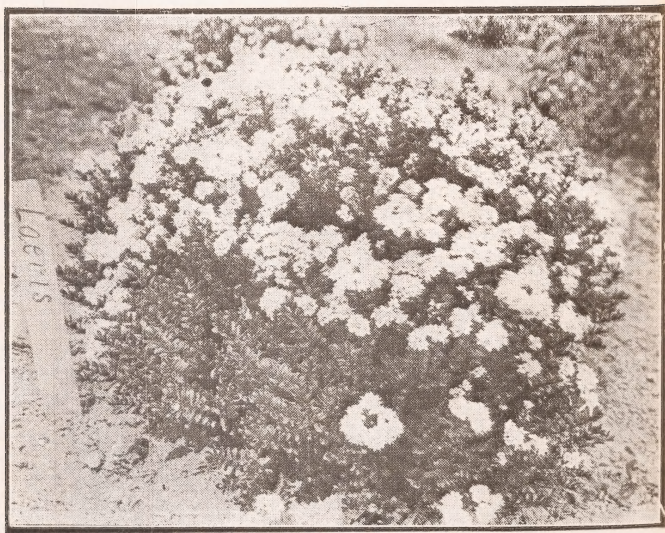


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V. LAEVIS, SOUTHERN ALPS.

ROMANCE OF THE NEW ZEALAND FLORA

Early Botanists: Period 1769-1840.

Banks, Solander, Cunningham, Diefenbach, Hooker, Colenso, Bidwell, Forster, Richard, Raoul, Sinclair.

Romance is an attractive word. Usually it is associated with stirring incidents in the lives of men or women, or both, culminating in good fortune or success in high degree; in the attainment of great wealth from small beginnings; or the fame that accompanies the development of brilliant mental powers. Or it may be that other romance wherein a lady of high position, disregarding the obligations of her station in life, forms an attachment with some swain in humbler circumstances, marries him, and "lives happily ever afterwards." Or should I not rather quote the popular lady of the music hall who marries a duke or an earl, whose romantic translation into the charmed circle of aristocratic life has, alas! proved in only too many instances not of the "lived happily ever afterwards" type? But the word romance has in modern days come to have a wider significance. It has been made applicable to the unfolding of the marvels of nature, or in commercial life to, say, the attractive story of Ocean and Nauru Islands and their vast deposits of phosphatic rock whose fertilising value is counted in millions sterling. Then we have the romance of the coal tar dyes, of radium, of wireless, of many other of the profound mysteries of nature whose entrancing stories lead us to marvel more and

more as we make efforts to fathom their mysterious power. May we not, then, extend the region of romance to the mysteries as profound that surround the plant life of the world? How wonderful is the germination of the tiny seed that has an inherent power of development into the forest giant, or into one or other of the thousands of forms of shrubs or flowers whose varying leaves and brilliant colourings and perfumes are among the greatest marvels of Nature. And in this favoured New Zealand of ours, if we have not the brilliance and the fragrance in our indigenous flowering plants that are among the features of those of other lands, we can certainly claim a variety and a charm in our plant life that has excited the wonder and admiration of scientific botanists from the days of Banks and Solander, of Hooker and Bidwill and Raoul, of Sinclair and Cunningham and Dieffenbach, of Colenso, Travers, Haast, Lindsay, Cunningham, Monro, Buchanan, and, to come to names with which we of the present day are more familiar still, of Kirk, Cheeseman, Cockayne, Petrie, G. M. Thomson, and H. J. Matthews. And with the above list the names of enthusiastic collectors is by no means exhausted. Such, for example, are M'Mahon, Enys, Armstrong, Traill, Townson, Chapman, Dr M'Kay, of Greymouth, Speden, Poppelwell, Crosby-Smith, Gibbs, M'Intyre, Aston, Carse, Treadwell, Wilcox, Hill, Kelly, and W. A. Thomson. To all these men the lovers of our native flora are indebted for the valuable and laborious work performed by them in their collecting expeditions extending over many years. The botanists who collected in our forests and on our mountains and plains in the first half of the last century, a record of whose extraordinary industry as collectors is scattered through the text books of Kirk and Cheeseman and Cockayne, of Messrs Laing and Blackwell, and in hundreds of papers in the Transactions of the New Zealand Institute, will stand for all time as examples of men whose enthusiasm and immense physical exertions should appeal to our present-day students and stimulate them to similar efforts.

I have given to this article the title "Romance of the New Zealand Flora," but I am perhaps justified in saying that there is no genus of plant life in this dominion which has aroused the interest of botanists to so great an extent as the VERONICA, and it is more in relation to that genus of our flora that I have felt constrained to write. If we consult the pages of Hooker's "Handbook of the Flora of New Zealand," we find the names of no fewer than 54 species of veronica that were discovered in this favoured land more than sixty years ago. Could we but have access to the diaries of the botanists whose researches were made in the early days of the colonisation of New Zealand, we should doubtless find recorded their keen appreciation of the exquisite beauty of many of the smaller species of veronica, which under the magnifying glass disclose an extraordinary delicacy of form in stem and leaf, in flower and fruit. In many of the species, notably in some of the whipcord type, the variations are strikingly wonderful. To the naked eye there is a similarity in character that gives no promise of other than sameness in the whipcord veronicas, but put the specimens under a magnifying glass of ordinary strength and beauties and peculiarities are disclosed that insensibly produce in the investigator a feeling of profound wonder.

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As bearing on my belief that there is no form of New Zealand native vegetation that so attracted our early botanists as the veronica, I may quote from a paper on "Hybridisation, with reference to Variation in Plants," by W. T. L. Travers, F.L.S., read before the Wellington Philosophical Society on 28th July, 1868. Mr Travers commenced an elaborate and thoughtful paper as follows:—

Amongst the plants indigenous to the Middle Island of New Zealand there are none which range more widely, both in altitude and in latitude, nor which present a greater amount of variation, than the veronicas. Indeed, as Dr Hooker remarks in the notes to the conspectus of this genus published in his "Handbook

of the New Zealand Flora," so numerous are the intermediate forms between very distinct-looking species as to render the species excessively difficult of discrimination, and to compel the adoption, for the purposes of an interim classification, of purely arbitrary characters founded on "prominent prevalent differences only." Dr Hooker, in a communication addressed to myself, in reference to a large and varied collection of specimens which I forwarded to him in the early part of 1864, whilst he was engaged in compiling the Handbook, remarked on the possibility that the variation referred to might be due to natural hybridisation, and asked me whether I thought this was the case. In reply I expressed an opinion against the supposition.

Mr Travers then says that at the time he wrote to Dr Hooker he had, partly as the result of reading and partly from observation, arrived at certain opinions on the subject of plant variation, and he stated this in the following propositions:—

1st. That certain classes of plants exhibit a greater tendency than others to acquire modifications as the result of changes in the conditions of life.

2nd. That variation resulting from this cause may be sudden, or may result slowly from the operation of this cause acting continually and regularly upon the same species in the same locality.

3rd. That the acquired modification will be transmitted to posterity, whether acquired suddenly or slowly.

4th. That under domestication variation exhibits itself the more readily, because the plant is usually subjected to a more rapid succession of changes in the conditions of life, many of which are specially applied analogically, in order to produce some particularly desired result.

Mr Travers explains at length the grounds on which he based his opinions, and in applying his views to the case of the New Zealand veronicas said he had taken into consideration the peculiar physical characters of the country—the mountains of the Middle Island, its ocean surroundings, the

broken character of its mountain district—broken up in a manner probably without precedent on the surface of the globe at any similar elevation above sea level. Mr Travers pursues his arguments with elaborate minuteness, showing in a particular example he gives “within what narrow limits large differences may exist in the climatal and other conditions to which the same plants may be exposed.” With special reference to the veronicas, he says “they have a very wide range, both lateral and ascending, sundry forms of this plant being found all over the Middle Island, from sea level up to great altitudes.” He shows that, under similar conditions, the purely alpine forms, at alpine elevations, vary very little indeed, “preserving everywhere an almost perfect similarity in their prominent prevalent characteristics.” Similarly with the species that affect low altitudes, very little variation is to be found—that they exhibit “only such small anomalies as constantly occur in the separate plants of any dominant species, without the necessity of supposing them to result from hybridisation.” In a final paragraph of his paper he adds that “although we cannot, consistently with observed facts, and with the laws fairly deducible from those facts, reject hybridisation as one of the agents concerned in the production of new forms in a state of nature, we are not warranted in assuming that it is an active agent.”

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The first systematic and comprehensive enumeration and description of the indigenous plants of New Zealand was made by Dr J. D. Hooker, F.R.S., in his “*Flora Novæ Zealandiæ*,” which formed the second part of the “*Botany of the Antarctic Expedition of Sir J. Ross*.”

That expedition left England in 1769, and in August of that year Sir Joseph Banks and his companion, Dr Solander, the botanists of the expedition, landed at Poverty Bay, Tolaga Bay, Opunake, the Thames, Bay of Islands, Queen Charlotte’s Sound, and one or two other localities, where they made good collections of plants.

Their MSS. descriptive of the plants, together with about 200 folio drawings, were afterwards prepared for the press, but were never published, and are still preserved in the British Museum.

When Captain Cook again visited New Zealand in the year 1772, he was accompanied by the two Forsters (father and son) and by Dr Sparmann. They collected about 160 species of flowering plants and ferns at Dusky and Queen Charlotte's Sounds.

Captain Cook's third visit to New Zealand was made in 1777, and his botanical collector on that occasion was Dr Sparman, the surgeon of the expedition, but nothing of any value was collected by him.

The next botanical collector to visit New Zealand was Mr Archibald Menzies, who accompanied Captain Vancouver on his mission to survey the coasts of North-west America, the expedition calling at Dusky Sound, where Mr Menzies landed and collected largely of the plants growing in the locality.

Good collections were made by Captain Dumont D'Urville in 1822 and 1827, his latter visit being in the "Astrolabe." The plants obtained by him and by his naturalist on the second visit, D. M. Lesson, were from Cook's Strait, the Thames, and the Bay of Islands. Descriptions of the plants obtained were published in Paris.

* * *

Dr Hooker's work was published in 1854-1855, and it included 1060 species of New Zealand plants. In the preface to his "Handbook of the New Zealand Flora," published in 1864, Dr Hooker mentions that he had re-examined most of the materials described in his earlier work, and that these consisted of the collections of Banks and Solander, and of Forster, in the British Museum, and of those of the Cunninghams, Colenso, Sinclair, Bidwill, Dieffenbach, Raoul, Lyall, and his own, all preserved in the Hookerian Herbarium; and he adds that since the publication of his earlier work, little of novelty had been added to the flora of the North Island, although many

interesting discoveries had been made in the South Island and that these added fully one-third to the previously known number of New Zealand's flowering plants. It will be seen from this how successful had been the plant-hunting expeditions of the botanists of those early days who were scouring the mountains and plains of New Zealand.

* * * *

We have to go right back to so distant a period as 1834 to trace the earliest acquirement of any comprehensive knowledge of our native flora by resident botanists. It was in that year that the Rev. W. Colenso arrived. Mr Cheeseman, in the preface to his "Manual of the New Zealand Flora," mentions that Mr Colenso was induced, first by the visit of the illustrious Darwin in the "Beagle," in 1835, and later by Allan Cunningham in 1838, to take up the study of the botany of his adopted country, and forwarded his specimens from time to time to W. J. Hooker at Kew. He traversed in the course of the next few years practically the whole of the North Island, and was the first European to reach Lake Waikaremoana by way of the rugged Urewera country. This journey covered a considerable part of the years 1841-2. In the following year he continued his researches and made long journeys in the Poverty Bay and Hawke's Bay districts, ascending the Wairoa River to Waikaremoana, and returning by way of Rotorua and Tauranga. In 1844 he moved from the Bay of Islands to Hawke's Bay and in 1845 made a botanising trip to the Ruahine range, ascending to the summit and being rewarded by the discovery of many previously unknown plants. Mr Cheeseman pays a high tribute to Mr Colenso's botanical explorations in the early days of the colony. His zealous efforts, frequently made under circumstances involving great privations and often no little danger, did not diminish with advancing years, "for the Transactions of the New Zealand Institute contain papers written by him describing plants collected during a journey made to the flanks of the Ruahine range in his eighty-fifth year"!

The Early Botanists—Sinclair, Lyall, Monro, W. T. L. Travers, von Haast, Hochstetter, Lindsay, H. H. Travers, Kirk.

Dr Andrew Sinclair was another botanist who visited New Zealand in the very early days of its colonisation. His first visit was in 1841 when the Antarctic Expedition, under Sir James Ross, was at the Bay of Islands. Sir J. D. Hooker was busily engaged in collecting materials for his "Flora of New Zealand," and Dr Sinclair and Mr Colenso accompanied him on many of his botanising expeditions. He subsequently returned to Australia, and accepted the position of private secretary to Captain Fitzroy, who had been appointed Governor of New Zealand. He spent his spare time very largely in botanical researches, and the valuable collections of plants he made from time to time he sent to Kew Gardens, where they proved of great service to Hooker in the preparation of his "Flora Novæ Zealandiæ." Dr Sinclair gave up his official position and after a brief visit to England returned to New Zealand and devoted himself to his botanical pursuits, discovering many new species of plants. He met an untimely fate by drowning in an unfortunate attempt to ford the Rangitata River in 1861.

Another of the early botanists was Dr Lyall, who accompanied Captain Stokes as surgeon and naturalist in H.M.S. *Acheron* in 1847-51 when Captain Stokes was engaged in surveying the coast line of New Zealand. The West Coast sounds were among the localities visited, and Dr Lyall did excellent work in those regions, among his discoveries being the magnificent ranunculus which bears his name.

The publication in 1853 of Sir J. D. Hooker's "Flora," with its systematic description of nearly 1800 species, of which over 700 were flowering plants, gave a great fillip to the systematic outdoor research work of many men who were interested in the subject in New Zealand, and Mr Cheeseman pays a just tribute to the fine work

performed by Sir David Monro in his exploration of a large part of North-eastern Nelson and Marlborough, during which he made many interesting discoveries, such as the splendid *Olearia insignis*, *Helichrysum coralloides*, *Celmisia Monroi*, *Senecio Monroi*, and others. Like others who have been earlier in the field, he also sent his collections to Kew.

Mr W. T. L. Travers was also a botanist of this early period who receives well-merited commendation from Mr Cheeseman. He arrived in Nelson in 1849 and about 1854 he took up the study of the alpine flora of the South Island. He made many excursions into remote and little-explored districts, and formed large collections, which he also sent to Kew. It is recorded that his discoveries included many singular and prominent species, and the genus *Traversia* (now reduced to *Senecio*) was named in his honour by Sir J. D. Hooker. Mr Travers, in those days of 60 years ago, contributed largely to the knowledge of the botany of New Zealand, and rightly holds a high place among those who in subsequent years profited by the close and intelligent observation of our indigenous plant life.

Sir Julius Haast and Dr Hochstetter were contemporaries in New Zealand in the closing years of the fifties, and after the latter had left the colony in 1860 Sir Julius Haast accepted an engagement from the Nelson Government and made himself familiar with the alpine vegetation of the province. He was in 1861 appointed geologist by the Canterbury Provincial Government. Then followed a series of expeditions into the Southern Alps, the botanical results of which, apart from his more immediate work of geological investigation, were most important and gave much information concerning the alpine flora of the colony. His expeditions and researches continued for a period of 10 years, and until his death in 1887 he manifested warm interest in the botanical section of his scientific studies. Many of his collections were sent to Kew and his name is commemorated in the genus *Haastia*.

Dr Lauder Lindsay was a botanist who visited New Zealand from Great Britain in 1861-2. He spent several months in botanising in Otago, and published the results of his researches in "Contributions to New Zealand Botany" in 1868. There also arrived shortly before Dr Lindsay an enthusiastic investigator of the flora of the colony in the person of Mr John Buchanan, who took up his residence in Dunedin. He collected large numbers of plants and made many important discoveries. The geological survey of Otago was at that period being organised by Dr Hector, and Mr Buchanan was appointed draughtsman and botanist. He accompanied Dr Hector in many arduous expeditions to Central and Western Otago, and the botanical collections made contained many rare and interesting specimens, among them being *ranunculus Buchanani*, *Hectorella cespitosa*, *celmisia ramulosa*, *veronica Buchanani*, etc. Mr Buchanan's researches were embodied in his "Sketch of the Botany of Otago," prepared at the request of the Commissioners of the New Zealand Exhibition of 1865, held in Dunedin; but it was not published until 1869, and appeared in the first volume of the Transactions of the New Zealand Institute. Mr Buchanan subsequently removed to Wellington, and for a good many years investigated the flora of the North Island and published many interesting articles in the Transactions. His early collections were sent to Kew, but he subsequently formed an extensive herbarium for the Colonial Museum. He died in 1898, and bequeathed his private collections and papers to the Otago University Museum.

I have mentioned that Mr Buchanan was intimately associated with Dr Hector, and it may truly be said that the work of both these scientists has a special interest for Otago people, because of the valuable service they rendered in the early sixties in the exploration of this province. A reference to Dr Hector's paper "On the Geographical Botany of New Zealand," to be found in the first volume of the Transactions, will show how valuable and com-

prehensive a knowledge he had of the distribution of plant life in the South Island. His name is commemorated in the endemic genus *Hectorella*, and in one of the finest of our flowering shrubs, *senecio Hectori*, and also in one of the most striking of the whipcord species of the *veronica*, *V. Hectori*.

In the early sixties Mr H. H. Travers, following in the footsteps of his father, Mr W. T. L. Travers, was an industrious collector. As a very young man he visited the Chatham Islands in 1863, with the special object of botanical research. During a stay of several months he succeeded in forming large collections of interesting plants, some of them new species. He again visited the Chathams in 1871 and added considerably to his first collection. Mr Travers has also collected largely in various parts of New Zealand, and has maintained a keen interest in the botany of the dominion right down to the present day.

Dr M'Kay, of Greymouth, a well-known medical practitioner in that town, promises to be a valuable asset to New Zealand botanically. He is a very active and enthusiastic collector, and has climbed every mountain of note within thirty miles of Greymouth. He is brim full of information concerning the flora of the West Coast, and being blessed with health, youth, and stamina, will, in the near future, supply many plants from the West Coast mountains. Dr M'Kay has a marvellous and most retentive memory, and it is a treat to listen to him when he is recounting the result of his botanical expeditions. He has a thorough botanical knowledge and a wonderful cognition of the distribution of our native plants. What a combination he and Mr Speden, of Gore, would make! The builders of Herbaria would be kept busy if these two enthusiasts were let away from their occupations for a few months.

Mr Townson collected in the north-west portion of the South Island down to Westport, and a Mr Helms worked as far south as Okarito, and spent a considerable time in the country below Ross and in the vicinity of the Franz Joseph Glacier.

Later Years.

The later history of the botany of New Zealand is largely bound up in the extremely valuable research and literary work of Mr T. Kirk, F.L.S., Mr T. F. Cheeseman, F.L.S., and Dr L. Cockayne, F.R.S., Ph.D. They have each and all contributed so largely to the fund of information available to private botanists and lovers of native plants for many years past that their names will be indelibly associated for all time with the fascinating branch of scientific studies with which they so closely identified themselves.

Messrs Laing and Blackwell, too, although in a minor degree, have performed a similar service in the publication of their informative book. It forms pleasant and instructive reading, and is a work which all those who love our native plant life have appreciated.

Mr T. Kirk's valuable work in connection with the botany of New Zealand extended over a long period. Generous testimony is borne to his services by his coadjutor and friend, Mr T. F. Cheeseman, who in the preface to the "Manual" writes as follows:—

‘In connection with Mr Kirk's activities in the field of New Zealand botany, I may fittingly mention the work published by him in 1889 on the forest flora of the colony. As explained, it was a descriptive account of the economic trees and shrubs of New Zealand, authorised by the Hon. John Ballance, formerly Minister of Lands, and confirmed by his successor in office, the Hon. G. F. Richardson. The primary objects of the work were the diffusion of a knowledge of the forest resources of the colony, a description of the chief methods of working and conversion employed, and to establish a uniform series of common names for the trees and their timber as used in commerce.

“For many years New Zealand botanists hoped that the preparation of a new flora would be undertaken by the late Mr T. Kirk. It was known that he had long been collecting material for such a work. His many journeys, extending from the North Cape to the Auckland and Campbell Islands, had given him an unrivalled per-

sonal acquaintance with the vegetation, while his numerous writings afforded abundant proof of widespread knowledge and of accurate and careful botanical research. Under such circumstances the announcement made in 1894 that he had been engaged by the New Zealand Government to prepare a 'Students' Flora of New Zealand' was received with general approval; and when his death occurred in 1897 it was a disappointment to find that barely two-fifths of his task had been completed. This portion has since been printed by the Government, and its value intensifies the regret that the author did not live to complete the work for which he had made so much preparation, and for which he possessed so many undoubted qualifications."

Taking up an odd number of the Transactions recently from among my series (and, by the way, it had on its cover the name Julius von Haast, in that distinguished scientist's handwriting), I found three separate contributions by Mr Kirk, on "Descriptions of New Flowering Plants," "Description of a New Species of Cladophora," and "Notice of the Occurrence of Lagenophora Emphysopus and Other Unrecorded Plants in New Zealand." There are one hundred and fifty of these contributions from Mr Kirk scattered through many volumes of the Transactions. They bear testimony to his great industry for a long period, extending from 1863, the year in which he arrived in the colony, until his death in 1897.

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In a letter to the writer of these articles Dr Cockayne recently expressed the view that:—" . . . Regarding our New Zealand plants, cultivation is a most powerful weapon in wresting from them those secrets which lie hidden in their forms and behaviour. Would that botanist and gardener worked more in collaboration."

Dr Cockayne's expression of opinion may well be emphasised. There can be little doubt that what may be called the botany of the people, as distinguished from the more exclusive botany of the scientist, must be

the surest means not only of keeping alive a popular interest in the habits and peculiarities and beauties of the flora of our Dominion, but, what is more important still, of actually preserving from extinction some of the species. It would be idle to under-rate the importance of the herbarium, wherein dried specimens of plants may be preserved even for centuries, and thus be the means of solving doubts that arise from time to time in the effort to determine the species—or even the genus, it may be—to which a plant belongs; but it can with even greater force be claimed that the preservation of living examples of all our beautiful and intensely interesting plants is of infinitely greater importance. Thus it is that the scientific botanist who is at the same time a diligent collector, who centres his interest equally in the growth of his plants as in his scientific description of their varied forms and habits, is a vastly more useful botanist than his colleague in the great botanical field who confines himself strictly to the scientific side of the work. It has been amply shown that the advance of settlement has in many ways endangered the preservation of many species of our native flora, and it is well, therefore, that we have among us many men who, though they have had no special scientific training—some, indeed, who have not had any educational advantages beyond those of the ordinary primary schools—yet have implanted in their nature a love of the herbs, the shrubs and the forest trees with which this land is so bountifully endowed. It is to these industrious and persevering collectors, who think no trouble too much, no physical exertion too great, no sacrifice of time to be regretted, in their praiseworthy efforts to secure specimens of our rarer plants, who are entitled to the warmest thanks of the community at large for their valuable work. It is in their gardens and grounds alone where anything like representative collections of the native flora can be seen.

And the knowledge of this raises the question whether this field of useful activity should not be occupied to a greater extent than it has been in the past by those who

have the control of the various public gardens in the Dominion. It cannot be claimed that in any one of these gardens in the principal cities is there to be found anything like an adequate representation of our indigenous plant life. I know it may be said in answer that there are difficulties in the way of removing this reproach to the civic administration of our public domains and gardens. The difficulty of finance is one. It must be admitted that the gathering together of specimens of the whole of our native trees and shrubs and herbs, the setting aside and preparing of the ground required for their accommodation, the watchful care and protection necessary for their healthy growth, would be costly. And no doubt it would be further contended that the general public take but little interest in these plants—that the popular taste lies more with the exotic shrubs whose brilliant and attractive flowers charm the senses, with the annuals and perennials that make the flower borders gay from season to season, with the splendid rosebeds and pergolas that are undoubted features of picturesque beauty—a vivid contrast to the well-kept grass with which they are interspersed. The answers have no doubt the element of truth within them. But they in turn are not unanswerable. As to finance, it is certain that where there is a will there is a way. And as to popular taste, I venture to say that it would follow—certainly with large numbers of gardening people—were the objects placed before them to develop the taste. May I venture to express the hope that the botanical enthusiasts of this province—scientists and non-scientists, individual lovers of plants and flowers, horticultural societies and gardening clubs—will turn this matter over in their minds, and by intelligent effort in the near future set an example to the rest of the Dominion. If they do so, they will, I feel sure, arouse a love of our splendid native flora that will speedily show itself in interesting collections in the private gardens of the people, as well as the more public places where plants and flowers delight the eye.

**Mr T. F. Cheeseman, F.L.S., and
Dr L. Cockayne, F.R.S., Ph.D.**

Of Mr T. F. Cheeseman, F.L.S., it is not an easy matter to obtain from his "Manual" any reference to himself which will assist in recording the great value of his services to botanists and those of the public who have had occasion to call upon him for information. He modestly says of himself in the preface to the "Manual": "I do not propose to say anything in regard to my own researches into the flora, beyond stating that they have extended continuously from the year 1870 to the present time, and include an examination of almost the whole colony, from the Kermadec Islands and the North Cape to Otago. A list of my papers on botanical subjects will be found in Mr Hamilton's Bibliography, Printed in Vol. XXXVI of the Transactions of the New Zealand Institute (pp. 342-72)." The Bibliography referred to shows that Mr Cheeseman had, prior to 1904, contributed to the Transactions no less than 43 articles on botanical matters. The information contained in these papers was the result of widespread travelling throughout the colony and in some of the outlying islands—the Three Kings and the Kermadecs,—and bears high testimony to the splendid work of Mr Cheeseman in the scientific realm which he has so long adorned. Of his "Manual of the Flora of New Zealand" it is hardly necessary for me to write. It is a text book of the very greatest value to anyone in this dominion who takes an interest in its botany, and no work of the kind has been, and continues to be, so largely consulted. The many additions that have been made to the flora of the dominion since the "Manual" was published have rendered a new edition necessary, and Mr Cheeseman has been engaged in the preparation of this for some time past. Its publication is looked forward to with deep interest, and it will prove of great use to scores of people throughout the dominion who take practical interest in its flora. The book will be a fitting copestone to the patient and valuable labours of a distinguished scientist, whose name will live for all time in the scientific

world, not only of this land, but of the central domains of science in Great Britain, the Continent, and other lands.

* * * *

Leonard Cockayne in his early days was a teacher under the Otago Education Board, and while stationed at Allanton in the Taieri was led to the study of botany by the perusal of a book on New Zealand ferns. Circumstances enabled him to leave the teaching profession, and he settled in Christchurch. In pursuit of his botanical studies, which soon became a hobby with him, and which he followed with characteristic energy, he started a collection of native plants in a small property he acquired in the southern alpine district. When Dr Diels published his paper on the botanical oecology of New Zealand in 1896, much of his information and material was derived from Mr Cockayne, who had travelled extensively in the Canterbury Alps. This branch of biological work, which deals with the habits, modes of life, relation to their surroundings, and distribution of organisms, was new to British botanists, and Mr Cockayne was practically the first to apply it, though his example has been greatly followed since. His first paper on a botanical subject was on the freezing of alpine plants, and it appeared in the "Transaction of the New Zealand Institute" in 1897. This was followed by three valuable and original papers "On the seedling forms of New Zealand Phanerogams and their development," in which, among others, he discusses the development and origin of the species of veronica. His first oecological paper, read in 1899, was "Plant Geography of the Waimakariri River Basin," and it was followed by many others which dealt with a large portion of the country. Altogether, he has contributed some 35 papers to the Transactions of the Institute, has produced several important botanical surveys and reports for the Government, and has published the most interesting book ever written on New Zealand botany—"New Zealand Plants and Their Story." The first edition appeared in 1910, and the

second—much enlarged and well illustrated—in 1919. A further great work on New Zealand botany, the manuscript of which was sent to Munich in Bavaria before the war, has just recently been published, though not available yet for New Zealand readers. The University of Munich granted Mr Cockayne the honorary degree of Doctor of Philosophy in 1903, while he received the greatest distinction open to naturalists in the British Empire by being elected a Fellow of the Royal Society in 1911.

LOCAL COLLECTORS AND THEIR TREASURES.

The Late Mr H. J. Matthews, Mr J. W. M'Intyre, and Dr Hunter.

During the time the late H. J. Matthews occupied the position of head of the Forestry Department of the dominion, his interest in its native flora, early implanted in his nature, increased and developed. He made constant excursions to the mountains and forest areas of both Otago and Canterbury, accompanied by his faithful private gardener, Mr J. W. M'Intyre, who had been brought up and trained as a practical gardener by Mr Henry Matthews's father, Mr George Matthews, of the Hawthorn Hill Nurseries, Mornington. The collections made by Mr Matthews and Mr M'Intyre were planted in the grounds of Mr Matthews's mother, Mr George Matthews having died many years before. The plants in the shrubbery, borders, and in the rockery which had been constructed for their reception, were zealously cared for, and the large collection of veronicas which had been got together formed a specially valuable feature of the whole. After Mr Matthews's death and that of his mother, the house and the portion of the property in which the native plants were located passed into the hands of Dr Hunter, who took a warm interest in the native-plant treasures he had acquired. Mr M'Intyre's services were retained, and needless to say under his assiduous care and that of Dr

Hunter, the collection increased from the accretions of their botanising expeditions and the skilled propagation of the rarer plants. The veronicas received their full share of attention, and selections from them have time and again been exhibited at the Dunedin Horticultural Association's shows.

The late Mr Matthews and his skilled co-adjutor Mr M'Intyre, have been instrumental in fostering a taste in recent years for the cultivation of those of our native plants which are suitable for rockery and shrubbery and flower border. Contemporaneous with their efforts, however, in this part of New Zealand have been those of other enthusiasts, among whom may be placed in the forefront Mr Poppelwell and Mr Speden, of Gore, and Messrs Hart and Darton, of Lawrence, the latter two gentlemen confining their work entirely to gathering together what it may safely be affirmed is the finest and most complete collection of the genus veronica to be found in New Zealand. Mr W. A. Thomson, of Half-way Bush, is another intelligent enthusiast in the same field, and in the charming grounds of the family home there are to be found many interesting and attractive forms of our native vegetation.

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Mr Poppelwell and Mr Speden.

I have already mentioned Mr Poppelwell and Mr Speden, who have both been industrious collectors in the Otago and Southland mountains. Recently I had the pleasure of paying a visit to their respective gardens and of inspecting their treasures. Mr Poppelwell's rockery contained many interesting plants—celmisias, veronicas, and aciphyllas predominating. Mr Speden was absent on one of his favourite excursions—this time far afield: no less than to the valley of the Hollyford, in that little frequented bush-clad region which stretches away to the West Coast traversed by the famous expedition of the late Mr Vincent Pyke in the early goldfields days. Mr Poppelwell courteously undertook the duty of showing our party over Mr Speden's

grounds and acting in the capacity of expositor of the wonderful collection of plant life there to be seen. We judged it to be among the most interesting collection of native plants of the smaller types that is to be found in any of the public or private gardens in New Zealand. Its owner has demonstrated what an added charm may be given to the public and private gardens of the dominion by a cultivation of the taste for our native plants, prominent among which may be placed for private gardens the smaller kinds of veronicas, the various species of celmisias, the ranunculi, ourisias, aciphyllas, etc. I shall not readily forget the pleasure given to me by this visit to Gore and the inspection of the plant collections of the two gentlemen who have largely helped to awaken an interest in the indigenous flora to be found on the slopes of the mountains of this part of the dominion.

Public-spirited Work of Mr H. Hart and Mr H. L. Darton.

Splendid Veronica Beds at Wetherstones.

And now let me pay tribute to the fine work that has been performed by two gentlemen who have for the past seven years been engaged in gathering from all parts of the Dominion, and cultivating a collection of veronicas which may now be said to include specimens of practically every species of the genus that has been found in New Zealand from the period of Darwin's visit to the present day. Messrs H. Hart and H. L. Darton, of Lawrence, began their commendable and public-spirited work in 1915. They were led to it primarily by a conversation between Mr H. Hart and the late Mr Peter Barr (the well-known member of the London firm of Barr and Sons) when on a visit to the Dominion some years since. After expressing his unqualified admiration for the New Zealand flora on account of its intensely interesting though puzzling variety of form, he concluded by asking Mr Hart why New

Zealand people planted their gardens with nothing but "imported" bushes. Mr Hart mentioned this conversation to Mr H. Darton, and these gentlemen decided to work together to see what could be done to create a more general interest in our native flora. They felt, also, that if something were not done soon many varieties of the New Zealand plants would disappear owing to the ravages of fire and their destruction by sheep and rabbits. The Government of New Zealand had made extensive arrangements for the conservation of New Zealand fauna by setting aside large areas for its preservation. Why might not something be done in a similar manner for our native flora? They felt that with a little extra care and trouble most of the New Zealand genera could be transplanted from their natural habitat, and grown more or less successfully in a new environment. The genus selected by them for a trial was the *VERONICA*, owing to the fact that it is by far the largest genus of our flowering plants. They procured a copy of Mr T. F. Cheeseman's "Manual of the New Zealand Flora" and set to work, and the result of their labours, extending over seven years, is now in evidence at Wetherstones, where almost all the species mentioned in the Manual can be seen settled down in their new homes, and growing, with hardly an exception, quite luxuriantly. It was known to them that a fair number of species were growing in several of the public gardens, and a ready response by the curators at Queenstown, Timaru, Oamaru, Dunedin, Invercargill, Christchurch, Wellington, and Gore was made to their request for cuttings of these. As a matter of fact, the first cuttings for their collection came from the curator of the Christchurch Gardens. Of course, many of these were unnamed, or wrongly named, but a specimen of each in flower and seed was sent on to the original collectors for their identification, and F. G. Gibbs, W. Townson, H. Hill, Dr Petrie, Dr L. Cockayne, and T. F. Cheeseman assisted them materially. Then a visit from Dr Cockayne to the plantation at Wetherstones cleared up many doubts as to the correctness of the classification.

The next step was to seek the co-operation of any who had veronica plants in their private gardens. Dr Irwin Hunter (who secured the late Mr H. Matthews's growing plants), Mr Seaton, of Fairfield, Messrs D. L. Poppelwell and Jas. Speden, of Gore, among others, were in strong sympathy with the movement, and large and important additions to the collection were thus made. Mr Hart and Mr Darton inspected again and again the veronicas planted in the various city reserves, always on the look-out for one that had been overlooked, and from this source several plants were added to the list. Any varieties listed by nurserymen were, if not previously possessed by them, gathered to the fold. A North Island nurseryman, in supplying a few plants which had been ordered, sent one wrongly named, but which turned out to be one of those which the Wetherstones cultivators much desired to have. In the hope that such another pleasing mistake might occur again, they purchased the whole of the remaining nursery collection, but their hope was vain.

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Visits to Public and Private Gardens by Messrs Hart and Darton.

Three or four visits were paid to the Christchurch Botanical Gardens, and several veronicas were unearthed from this source. One is certainly a very rare and pretty plant, about 10ft high. The name given to it by its new possessors for distinctive reference, Upokotangatai, brings forth from visitors the question: "Whoever gave that name to it? What does it mean?" Another, Karamui, also locally named, has the makings of a novel bush. Both these veronicas came originally from the Chatham Islands. Many a time the searchers had to get down on all fours and explore under the many big trees that now adorn the Christchurch Gardens. What was most striking were the immense labels used there by Armstrong and his predecessors forty or fifty years ago. Every hole and corner was searched with the hope that, hidden away in some remote place,

some of the long-sought-for varieties might be found. Mr Young was ever ready to help, and did all that was asked from him in his most genial and happy style. An old label of *Ligustrifolia*, a plant that is much desired at Wetherstones, was found in the gardens at Christchurch. Apparently the plant had been growing there at one time. Many cuttings were brought away labelled *Ligustrifolia* by the searchers, but when grown at Wetherstones they proved to be the wrong thing, showing that if you put the name of apple on a cabbage plant there is no chance of it developing into anything else but a cabbage.

Visits were paid to the Timaru and Oamaru public gardens. In the former place the searchers were given a free hand, and that lovely plant, *Diosmaefolia Trisepla*, was got from Mr D. Harper, the caretaker, who has a very fine lot of veronicas growing under his care. Oamaru Gardens were searched from one end of the garden to the other, and as the grounds are of some extent, hours and hours at different times were spent exploring every nook and corner in the place.

The Queenstown Gardens, then in charge of Mr W. Wilcox, supplied many species now at Wetherstones. Mr Wilcox spent much time in visiting the old gardens in Otago in search of New Zealand plants, and was extremely successful. He also climbed the mountains around Queenstown, and was rewarded by getting several new species of veronica, one of which bears his name, *Wilcoxi*, and it is certainly a very distinct and decorative little bush. At Queenstown were also got *V. Macrocarpa* and its varieties. This has been the most difficult and complex assortment Messrs Hart and Darton have had to diagnose, owing to the similarity of the plants to other varieties. Eventually they brought order out of chaos. Mr Wilcox left no names on his plants when leaving Queenstown. This was certainly not altogether his fault, but was more due to the destructive label vandal, who, when visiting our public gardens, takes a keen delight in changing labels from one bush to another,

and in other cases pulls the labels up and throws them away.

The old gardens of Riverton and Orepuki were closely scanned and searched, and although nothing of note was found in these places many fine old veronicas were seen.

Invercargill Gardens had been planted fifty years ago with many choice native plants, and it was here *V. Parviflora* was first seen, the original plant having been brought from the Great Barrier in 1872. Another plant got from Invercargill was *V. Martini*, which is not described in the Transactions. This plant was found by Mr Martin and Mr Edginton nearly fifty years ago on the Longwoods, but is now practically extinct on these mountains.

An important source from which the collection of Messrs Hart and Darton was built up was the Dunedin Botanical Gardens. Here for many years, chiefly through the assistance of the late Mr H. J. Matthews, an extensive collection of veronicas was being gathered together. At the time of Mr Matthews's death the Dunedin Gardens secured specimens of every veronica he had, in addition, of course, to many other valuable native plants. These were for the most part arranged in the rock garden opposite the Band Rotunda, where something like 100 different varieties may be seen to-day in particularly vigorous and flourishing condition. The first which Messrs Hart and Darton obtained from this source were received in exchange for daffodil bulbs, and were for planting among the daffodils on the hillsides. The Lawrence collectors were given free access to the Gardens to obtain any species they desired, and they in turn have given specimens to Mr Tannock so that he has now in his nursery an almost complete replica of the collection at Wetherstones. Many of the species from Mr Matthews's garden were unnamed, and the work of identification and classifying has been done by Messrs Hart and Darton.

One of the first of the private gardens to be visited was that known to a large circle of Nature-lovers as "Martin's Garden." It is situated on a sunny slope at Fairfield.

seven miles from Dunedin. It comprises some five or six acres in all, and was the home of the late Mr Wm. Martin for more than a quarter of a century. Mr Martin was a tireless collector, and a most enthusiastic grower of the genus *Veronica*. His name is associated in veronica literature, particularly with *V. Fairfieldii* and *V. Erecta*. The first visit of Messrs Hart and Darton to this historic spot was made on a wintry day in August, 1917, and they describe it as a never-to-be-forgotten day. *Veronicas* everywhere, growing promiscuously with other plants, and in many cases overgrown by them. Very few of them were labelled, and no apparent attempt made at classification. Chaos reigned; but the plants were there, and that was the main thing. Among the species were *Diosmaefolia*, *Macrourea*, *Macrocarpa*, *Parviflora*, *Hulkcana*, *Fairfieldii*, *Linifolia*, *Salicornioides*, *Cataracta*, *Obovata*, *Pime-lioides*, and many others. Strange to say not a solitary plant of *V. Erecta* was to be seen, although diligent search was made for it on this and on several subsequent visits. Most of the *Fairfield* plants have since been identified, but there are at present growing at Wetherstones about a dozen species from *Fairfield* waiting to be named and described. Mr Seaton, the present owner of the property, most courteously placed his garden at Messrs Hart and Darton's disposal, and gave them carte blanche to remove to their new home specimens of any of the species to be found there. Needless to say, this generous offer of Mr Seaton was gratefully accepted.

The next step was to study the dried veronica specimens in the local herbaria. Those of the late Mr H. Matthews and Mr John Buchanan were courteously made available for their inspection. To the custodians of these collections the owners of the Wetherstones collection desire to express their grateful thanks. At the Carnegie Library they were privileged to gain access to the surprisingly large collection of works on the native flora, among them being the publications of Dr L. Cockayne, Dr Lauder Lindsay, Messrs T. F. Cheeseman, Kirk, and Hooker, and in addition

the completed volumes of the "Transactions of the New Zealand Institute." I am asked in these articles to convey to Mr M'Ewan, and to his assistants, Miss Bryant and Miss Elliott, the sincere thanks of Messrs Hart and Darton for the unvaried courtesy extended to them on many occasions, and their appreciation of much valuable assistance in marking works of reference and for help in many other ways in connection with their research work.

Having exhausted the list of species growing in public and private gardens, Mr Hart and Mr Darton next approached the collectors themselves for the rarer plants and those growing in localities not frequently visited. They have pleasure in recording that, within a few months Mr H. Carse, of Kaiaka, Auckland, collected and sent *V. Plebeia*, a rare and local plant; *V. Tetragona*, first collected by J. C. Bidwill in 1839; and *V. Carseii*, a new species found when looking for *V. Tetragona* for the Wetherstones collection. Mr James Speden, of Gore (who has probably sent in more new species than any other naturalist) sent—*V. Poppelwellii*, *V. Dasyphylla*, *V. Pulvinaris*, *V. Burleyi*, and many other species yet to be described and named. Dr Petrie, of Auckland, has sent many treasures, among them being *V. Laevis* (North Island), *V. Colensoi*, *V. Pubescens* (first described and named by Banks and Solander in 1769), *V. Bollonsoi* (from the Poor Knights), *V. Procumbens*, *V. Townsoni*, and *V. Obtusata* (a recently-discovered and most interesting species). Dr L. Cockayne sent a plant of that interesting species, *V. Tetrasticha*, cutting of *V. Buxifolia*, *V. Glaucophylla*, a new species, yet to be named, from Sugar Loaf, New Plymouth, and several varieties of *V. Salicifolia*—viz., *Egmontiana*, *Kirkii*, *Atkinsoni*, and *Angustissima*.

Messrs Treadwell and B. C. Aston are helping with the North Island species, and have contributed *V. Astoni*, *V. Hookeriana*, and *V. Olseni*. In the near future an effort will be made by them to collect *V. Spathulata*, so far outside the fold. Mr T. H. Macmahon, of Marlborough, supplied two or three varieties of

V. Vernicosa, as well as four or five other still unnamed species from the Awatere Valley, Marlborough, and the adjacent mountains. Mr F. G. Gibbs collected and sent *V. Vernicosa* from the Dun Mountains, Nelson, and a new species, *V. Acutifolia*, from the Western Mountains.

By Mr Willcox many interesting plants were collected and forwarded—*V. Willcoxi*, *V. Bidwillii*, *V. Linifolia*, *V. Rakaiensis*, and a new species so far unnamed, but which he proposed to describe and name as *V. Hartii*.

Dr M'Kay, of Greymouth, gathered and sent on *V. Gilliesiana*, that very interesting species quite unlike any other, which has for long hid itself from the view of naturalists. Mr Hart and Mr Darton themselves traversed the mountain slopes near their own district, and gathered *V. Propinqua*, *V. Linifolia*, *V. Staner Cerulea*, *V. Buxifolia*, and a new species still unnamed, but somewhat similar to *V. Rakaiensis*.

V. Benthami has been collected at the Auckland Islands, and plants are being grown there to await a visiting vessel to bear them away to join the collection of the genus at Wetherstones.

Some of the Veronicas Growing at Wetherstones.

It will not be without interest if I give short popular descriptions of a few of the species to be seen in the Wetherstones collection, and I have selected the following as very interesting plants:—

Who can look at the little gem, *Bidwillii*, and fail to be impressed with the delicacy of its creeping tendrils and foliage, which have pushed their way over the stones by which it is surrounded, until there is nothing to be seen but a green surface of graceful beauty? And in its flowering season how that beauty is enhanced by the tiny buds and florets of palest lavender that contrast with the delicate green in which they are embedded. *Bidwillii* is a diminutive form of the genus, but it has always

had an attraction for me, and it will ever remain one of the favourites of my veronica bed.

Then let us look at *Plebeia* for a moment. Of the same creeping character as *Bidwillii*, how different is its foliage, and yet now interesting. Pushing along with some vigour and luxuriance of growth, its soft procumbent stems and ornate leaves appeal at once to the onlooker as unlike those of any other veronica—something of an entirely different character indeed, yet with an attractive charm. Of its pigmy flowers it may truly be said that they, too, seem to be quite unallied to the flowers of any of the veronica tribe. Standing out solitarily, pin-head in size, lavender in colour, they look almost out of place in association with the luxuriant foliage of the plant. But Nature often provides these sharp contrasts, and in this instance, as in many others, doubtful criticism must not be mine.

And of *Tetrasticha* how must I write? If *Plebeia* is in foliage and habit so unlike its congeners, how widely different is this plant of the four branchlets—how strangely at variance with the ordinary type of stem and branchlet and leaf. Its colour also—grey-green, with perhaps the faintest tinge of blue to deepen the grey—how it at once arrests the eye! Its flowers I have not seen: my specimen plant is too young; but I see they are described by Mr Cheeseman as blue in colour. Meantime I must be content with the pleasure of anticipation, for I am not likely to have the privilege of feasting on the beauties and peculiarities of this and other rarer species of the genus in their mountain homes—that must be left for the enthusiasts of less mature years.

And now let us consider for a moment, before dealing with the whipcords, some of the other smaller species of this prolific form of our vegetable life—*Lycopodioides*, *Muelleri*, *Astoni*, let us say, as three species of the smaller type of veronica.

How appropriately named is *Lycopodioides*. Inevitably the interested visitor who is making his first acquaintance with these remarkable specimens of New Zealand's plant life, must exclaim, "What a

striking likeness it has to a lycopod!" That is to say, to a lycopod of a particular type. Of a light and tender green, its closely-packed leaves specially attract the eye where there is so much to attract in the bed. It matters not that it is not viewed in its flowering season: it is a charming little plant, fit to take its place among the best of its fellows.

And of *Muelleri*? Here, again, we have a veronica of the most diminutive type—so diminutive, indeed, that it requires the sharpest of eyes to detect it if in its native surroundings, probably growing among other vegetation, its rootlets running along under the surface and sending up their short stems topped with their little green leaflet caps. *Muelleri* is not a species that grows very readily under cultivation. It has a habit of withering off in portions, but such is, however, not a characteristic that has shown itself in my specimen plant, and I am in hopes it will continue its growth uninterruptedly.

As to the identity of *Gilliesiana*, there has been some discussion of late among the few people who have had examples of the species in their grounds. There were one or two plants of so-called *Gilliesiana* in the Christchurch Public Gardens, and Mr Hart had another in his veronica plantation at Wetherstone. That it was really this species, however, he had grave doubt. I discussed the matter some time back with the superintendent of the gardens at Christchurch, who was reasonably well assured that the plants he had were *Gilliesiana*. The doubt as to this was made stronger when an inspection of a dried specimen of the plant in the herbarium of the late Mr H. J. Matthews disclosed characteristics similar to those described in Mr Cheeseman's "Manual," and entirely foreign to the living plants above referred to. Confirmation of the doubts being justified came shortly afterwards in the finding of plants of the true *Gilliesiana* by Dr M'Kay, of Greymouth, an enthusiastic collector, who, after several failures on some of the mountains of the Grey district, finally located the elusive *Gilliesiana* on one of the peaks over 4000ft high—a meritorious and gratify-

ing find at the cost of much previous exertion and disappointment. Plants were at once sent to Messrs Hart and Darton, and two or three of these rootlets are establishing themselves in my veronica bed at Mornington. They are not much to look at yet, and even when established Gilliesiana may not be one of the gems of the veronica world, but interest lies in the little history I have narrated of Dr M'Kay's success in locating plants of the species after his praiseworthy exertions, and of settling the doubts of present-day lovers of the veronica as to the identity of the plants in the Christchurch Gardens and elsewhere.

The Whipcord Veronicas.

Coming now to the whipcord species, the most cursory inspection of them discloses such extraordinary variations in their characteristics as to excite wonder and admiration. It is not necessary that an interested examiner of them should possess abstruse botanical knowledge to enable him to admire and marvel at their peculiarities and their variable structure, although it is to be admitted that scientific knowledge discloses features that must escape the attention of a non-scientific investigator. It is only from the standpoint of the latter, unfortunately, that I am qualified to say anything about them, and if I fail to adequately refer to their structural beauties, I need only ask those of my readers who are specially interested to consult Mr Cheeseman's richly informative volume. Nor, indeed, does space permit me to do any more than make the sketchiest references to a few of the most striking of the species. If my few imperfect sentences have the effect of inducing readers of these articles to take a wider interest in the growing of whipcord veronicas in their rockeries, I shall be amply repaid for any trouble I have taken in acquiring some superficial knowledge of the species. Such a visit as I recently paid to the veronica beds at Wetherstones which have been established under the fostering care of Messrs Hart and Darton, does more, I know, to inspire a keen interest in the

plants and a profound realisation of their extraordinary characteristics than any description that can be written. I regret that the privilege of making such a visit cannot be more generally availed of, but Wetherstones is too far distant from populous centres to permit of the belief being indulged in that many people can hope to make the journey. But I must now endeavour, however imperfectly, to devote some space to a description of a few of the most striking of the species from an inspection of the Wetherstones plants.

Cupressoides.—The plant I saw was about five years old, propagated from a small rootlet, and is a finely rounded bush, about 4ft in diameter. As its distinctive name implies, its foliage resembles that of the cypress. The branches are numerous and divaricating, foliage minute and of a greyish green. The flowers are small, and lavender or white in colour. The species is found in Nelson, Canterbury, and Otago, and was originally collected by Hector and Buchanan in the Lindis Pass and Lake district, and by Petrie in the Lammerlaws. It grows to a height of 6ft or more.

Salicornioides.—The specimen inspected is a twenty-year-old plant, with a height of 2ft 8in. This species is of the purest whipcord type, with foliage—or what does duty for foliage—entirely different from *cupressoides*, and of a dull green colour. It is very rare, and the plant at Wetherstones, and one in Dr Hunter's garden at Mornington are the only two known to be in cultivation. To these have now to be added a young plant in the veronica bed of the writer of these notes.

Armstrongii.—A twenty-year-old plant, 2ft 3in high, foliage dark green on parts of the branches shaded from the sun, but where exposed to the light and the sun an old-gold tinge is a marked and attractive characteristic. This species is closely allied to *Salicornioides*, but of a more spreading habit of growth. It grows in the mountain districts from Nelson to Otago.

Hectori.—Probably the finest and most striking of the whipcords. Its strong branchlets, stiff and erect, and its bottle

green colour, with the young tips of lighter shade, at once arrest attention. The plant I inspected was five years old, and had attained a height of 2ft, with a diameter about the same. The maximum height of the species is about 30in. The altitude at which it has been collected ranges from 3500ft to 6000ft, and it grows in many places in the Southern Alps. It is very rarely found in flower, but has been so found in the Otago Lakes district. It is a truly handsome plant, and should be in all gardens where veronicas form part of the attractions.

Coarctata.—A small, compact bush, which reaches a maximum height of 3ft, although the specimen I saw was only 12in. The foliage is of a much lighter green than that of *Hectori*. It has a spreading habit of growth, and has appressed imbricating leaves; flowers white, forming small terminal heads. Its character is not so vigorous as that of *Hectori*, to which it has, however, a strong resemblance, and may be described as a plant midway between *Hectori* and *Armstrongii*. It was collected in the Mount Arthur and Mount Owen ranges by Cheeseman, and in the Brunner range by Townson.

Cassinioides.—This species was found by H. J. Matthews, and although differing markedly in character, with its cassinia-like foliage, from *Hectori*, *Coarctata*, and others of the whipcord tribe, it has been classed with them. It does not attract, perhaps, so strongly as plants of the distinctly marked whipcord type, but is well worthy of a place among its congeners.

Laingii.—This is a moderate-sized—almost dwarf—and altogether charming little plant, with bright green foliage—the young tips the tenderest and lightest of greens. It is of compact, yet spreading, growth. The small pointed leaves are opposite, and in pairs of four. Found on Mount Anglem, in Stewart Island.

Imbricata.—Collected on the Hump Mountains by Speden. A most distinctive whipcord, with dull green stems and branchlets, without the small leaflets of

Laingii. Branches palmate and spreading. The plant I saw is young, with indications that it will not attain to anything but a very moderate height, the branches bending almost to the ground.

Albicans.—A most remarkable and novel bush, barely a foot high. The ordinary person would not take it for a veronica. The leaves are amplexicaul at the base, thick, very coriaceous, and of pale sage green colour on both sides. The flower is white with purple-coloured tip, and is about as thick as a finger and 2in long. There would certainly be a demand for this little plant if in commerce. It is found at the head waters of the Rangitata River.

Of the dwarf varieties of the whipcords at Wetherstones I may pick out for special mention *Loganioides*, *Fenwicki*, *Spedeni*, *Hunteri*, *Poppelwelli*, and *Garviei*. As to these specific names, it is necessary I should say that only *Loganioides* and *Poppelwelli* have been officially described.

Loganioides is an interesting little plant, of spreading habit, with branches and foliage uncommonly like those of the heaths. It has aroused a great deal of interest among botanists, and Mr Cheeseman describes it as a remarkable plant, quite unlike any other, although the habit of the plant, with its woody stems and small, close-set leaves, is nearer that of the section including *V. lycopodioides* and its allies.

Hunteri was found by Speden in the Hump Mountains. It has delicate, thin, almost lacy branchlets, with the usual distinct whipcord plait. It roots freely wherever the little branchlets touch the ground, and is a free flowerer, the flower being white.

Fenwicki is a species found by H. J. Matthews on Mount Earnslaw about fifteen years ago. It is a pretty little plant, very small, with light foliage, and specimens are in the gardens of Dr Hunter and the writer in addition to those at Wetherstones and the Dunedin Botanical Gardens.

Spedeni was discovered in the Dome Mountains. Its foliage is of a golden brown colour, and forms an excellent little rock plant, the distinctive colour of its foliage being in contrast with the green foliage of its fellows.

Poppelwellii is another charming little plant of the dwarf type, light green in colour. Like all of the tribe, it is easily propagated from cuttings or rootlets, and is worthy of attention.

Garviei was found by Speden on the Garvie Mountains. It is a close, compact little plant, with delicate branchlets, and one of the best for interesting rockery growth.

The Larger Species: Some Fine Plants.

Having enumerated a few of the whipcords of the dwarf type, as well as those of a larger growth, I will close this enumeration by short reference to some of the most striking of the species of much larger growth and entirely different characteristics.

Dorrien-Smithii.—This species was found at the Chathams and named after General Dorrien-Smith. From its appearance the plant gives one the impression that it is a climber. At the present there are only three plants in cultivation—one at Wetherstone, one at Dr Hunter's, and the third in my own collection; consequently there has been but little opportunity of watching the habit and of noting the possibilities of this charming species. The leaves are set far apart, and are of an intense green, with a reddish hue near the petiole, which gives the plant a peculiar appearance. The flower is most striking, being of a transparent white colour, with a faint lavender centre. The flowers are loosely set on a tapering raceme of about 3in long. It is certainly one of the most graceful and charming of the veronicas.

Anomala.—A very handsome and attractive species. The shrub is a perfectly erect one, 3ft to 5ft high when full grown. The branches are inclined to be red, with purplish tips. When small the plant is most beautiful, and makes a perfect little specimen at 3in and 4in high. The flowers are white, and in some cases on the same bush pale pink. A much admired shrub, and one that cultivates most readily.

Gigantea.—The giant of the tribe and a noble plant. It is a native of the Chathams. In the opinion of some the plant would lend itself to street planting from the fact that it is not clothed with leaves till well up the stem. The plants I have seen are between 4ft and 6ft high, the foliage barely 2ft through. They are just three years old. The branches are stout and short. The leaves are pale green and quite fleshy. The plant is most noticeable among its congeners, and is admired greatly from its bold and arrogant appearance. I predict a great future for *Gigantea* when plants are procurable. It has not flowered with those who own plants in Otago. The flower is said to be lilac-purple. There is no doubt that *Gigantea* is a relation of the smaller species of *Veronica Dieffenbachii* and *Veronica Barkeri*. The wood is extremely hard and tough for a tree that grows so quickly.

Parviflora.—There are two lovely specimens of this plant in public grounds in this city—one at the Early Settlers' Hall, and another at the Museum Buildings. It is a native of the Great Barrier, and in a wild state has been seen 20ft high, but being a slow grower takes many years to reach that height. The tree is much branched, with a round dome-shaped head. The leaves are narrow—about a quarter of an inch wide. The flowers are small and numerous, with a lilac tinge, but the plant is a shy bloomer under cultivation. The plant I am describing is certainly not like the *Arborea* in Buchanan's herbarium, which Mr Cheeseman took to be identical with that which Vahl described in the Manual. (Cheeseman gives his description from Vahl).

Matthewsii.—For sentimental reasons this charming plant will always remain a favourite of mine, as it was originally found on the slopes of the Humbolt Mountains by my old and valued friend, the late H. J. Matthews. It is a handsome plant, not much more than 2ft high, often less. The leaves are purplish red. It is a remarkably free bloomer, being covered completely

with purplish flowers, and is the admiration of all who have seen it.

Divergens.—This species has only been found in one place in the Dominion—on the coast near Brighton, south of Westport. It is an attractive bush, and is clothed with leaves from the ground to the tips of the branches. The flowers are of two colours—pure white and purplish pink. The branches are twiggy and divergent, from whence it gets its name.

Gracillima.—This is another West Coast plant, and is well named. It is a much-branched shrub, with narrow pointed leaves about 2in long. The bush when full grown is about 4ft high, and as its head is not unlike an open umbrella, the resemblance being accentuated from the fact that it is naked on the lower branches. The flowers are very graceful, and the colour is a delicate purplish white.

* * * *

CONCLUSION.

To get together such a collection of veronicas as are crowded into the beds at Wetherstones has necessitated a considerable amount of correspondence, but Mr Hart and Mr Darton have met with such cordial support and so much practical assistance that the work of collecting has been indeed a pleasant one. There are now to be seen growing at Wetherstones eighty-six species named and described in the Manual or subsequently in the "Transactions," and over thirty new and yet undescribed species. The number of varieties is well over 250.

Such a valuable and important collection of what I believe to be the most interesting genus of all our native plants I think it will be admitted should not only be carefully preserved, but should, through industrious propagation, be made available for the public gardens of the Dominion, under some well-arranged scheme of distribution. It is a monument to the energy, perseverance, and public spirit of two

men, who, in the face of much difficulty over a fairly long course of years, carried to success an enterprise that entitles them to the thanks of all lovers of our native flora throughout the Dominion.

There are manifest signs of an awakening interest in the lavish wealth of our native trees and shrubs and herbs, and not the least gratifying evidence of this to one who has spent his life in Dunedin is the forward movement in connection with our local Botanical Gardens. Mr Tannock is to be congratulated on the project he has formulated for the establishing of a comprehensive nursery of considerable dimensions, in which in due course will be established specimens of the whole of our native flora likely to succeed in the south. Already, as I have mentioned previously in these notes, there is a fine nucleus in the collection of many of the species bequeathed to the city under the will of the late Mrs George Matthews. That nucleus, it may now be reasonably hoped, will in the course of a very few years be extended to include specimen plants from one end of the Dominion to the other, and with the establishing of many genera that are practically unknown to the public at present, there should arise an extended interest among our public school teachers and their pupils, as well as among the general public, as should remove the reproach at present existing that our young people know hardly anything about the flora of their native land.

In the Christchurch public gardens there has been for many years a large collection of veronicas, mostly of the taller species. Some of these are of great size, and a visit recently paid by me to the gardens showed a good deal of misplacing of labels. It would be well worth while to have this rectified, so that those of the public who are interested should not carry away incorrect information. The Christchurch collection is distinctly valuable and interesting.

In one of my earlier articles I mentioned the names of a number of industrious collectors of the New Zealand flora who deserve to be remembered, but I am

conscious I must have omitted others equally deserving of recognition. Among these that have come to my recollection are Miss L. G. Gibbs, Mr George Biggar, of Croydon, Professor Wall, of Canterbury College, Mr W. W. Smith, of the Taranaki public gardens, and Mr H. H. Allan, of Christchurch, who has just been awarded his Doctorate on his thesis upon the vegetation of Mt. Peel, South Canterbury, all of whom have been prominent collectors in the mountains where many of our interesting native plants are alone to be found. It is certain that I have omitted the names of others, and to them I can only express my apologies.

May I say in conclusion that it has been a great pleasure to me to have been associated with Messrs Hart and Darton in their work during the past year, and if the writing and publication of this series of articles has been of any service to them, and results in a wider interest being taken in a subject which, as I have said, there is reason to suppose is gaining in public favour, then I am amply rewarded for any little trouble I have taken.





AT TE REINGA.

FARTHEST NORTH IN NEW ZEALAND.

A MEMORABLE MOTOR TOUR

**Cape Maria Van Diemen, Te Reinga,
Spirits Bay, and Parengarenga.**

The Interesting Country of the Far North.

By **SIR GEORGE FENWICK.**

In fulfilment of a long-cherished desire the writer recently paid a visit to much of the historic ground in the far north of the Dominion, accompanied by his son, Dr Fenwick, of Auckland. We embarked on the Northern S.S. Company's steamer *Manaia* at 11 p.m. on Easter Monday, 17th April, having first got my son's car on board, as we intended to commence a long motor tour immediately after reaching Whangarei.

With the aid of an obliging steward I got settled down in a lower berth of one of the *Manaia's* small cabins, much too far aft to be pleasant had the weather proved to be unpropitious. But any fear as to this proved to be groundless, and we had a peaceful trip northward, and entered Whangarei heads about 6 a.m., and reached Onerahi, the outlying port of Whangarei, an hour later, passing Limestone Island on the way. Thence we left by train for Whangarei an hour and a half later. Whangarei is a pleasant and prosperous little town with 4000 inhabitants, with its daily newspaper, the *Northern Advocate*, to keep

the people of the town and district abreast with the news of the outer world and chronicle events of local interest.

It had been our intention to leave Whangarei very shortly after our arrival, but there was a delay in getting the car up by train from Onerahi, this course having been considered preferable to taking the somewhat rough stock road. The delay was really fortunate, for we had got into touch with Mr Arthur Holmes, the courteous manager of the North Auckland Farmers' Co-operative Association, Limited, their no less obliging secretary, Mr Joseph Mackie, and Mr Crawford, the proprietor of the Northern Advocate, to all of whom we were indebted for many courtesies. They at once set about enabling us to visit some of the show spots of Whangarei, notably a charming piece of native bush close to the town, known as "The Grotto," the property of Mr Watts, who has with intelligent discrimination and loving care made some tracks through his beautiful property, and is in addition a successful grower of tomatoes, oranges, and lemons. There was in his garden a wonderful display of cosmos, growing with a luxuriance that is not to be seen in the south. In our journeyings further north later on we were to see many gardens where cosmos made a brilliant display, and in more than one instance the beautiful flower was grown as a hedge!

The visit to "The Grotto" was followed by a 15-mile run to the celebrated Wairua Falls. They are the source from which power is derived to supply electric light and power for the town of Whangarei. The falls afford a really fine spectacle, lacking of course the majesty and profound impressiveness of Niagara Falls, but reminding one somewhat of their grandeur. We had seen much splendid dairying land in the vicinity of Whangarei and for a good many miles further out, and the beautiful green paddocks, with the dairy cows grazing contentedly in these as we passed the prosperous looking homesteads that flanked the road, afforded a pleasing picture as we again neared the town. We returned in good time to catch the 3.20 train for Kawakawa, distant about 80 miles.

Whangarei to Kawakawa, Ohaeawai, Kaeo, and Kaitia.

We now felt that we had fairly embarked on our northward journey, and became interested in the various townships and sidings at which the train stopped—some of their names familiar to us, far away though they be from my southern home. The first stoppage was at Hikurangi, where are situated the well-known coal mines. The township is 10 miles from Whangarei, and the time occupied in reaching it was three-quarters of an hour. Slow travelling! Ten or 15 minutes afterwards we stopped for a minute or two at a siding where is situated, close to the railway line, an extraordinary deposit of pure limestone. This is the property of Wilson's Portland Cement Company, and the stone is quarried for use at the company's great works in Whangarei Harbour. It is reduced to powder and intermixed with the rock procured from the company's enormous deposit near its works, adding to the richness of the cement product. Huge blocks of the stone at Hikurangi stand up in great pinnacles whose picturesque boldness is most striking. Ten minutes afterwards the little station of Whatapara was passed. We had been told that from this township onwards the roads were very bad and this information had induced my son to put his car on a truck and decide to commence our motor tour after reaching Kawakawa.

The train continued its course through a pleasant dairying country, with volcanic bush-clad cones at intervals in the distance, dairy farms succeeding each other, with cows within railed enclosures waiting to be milked. We stopped at the little station of Hukerenui for a few minutes, with two magnificent clumps of pampas grass just opposite, and, resuming our journey, passed a dairy farm, with more cows in an enclosure waiting to be milked, and on and on past more dairy farms, more waiting cows, through manuka and flax country, with sluggish streams and poor-looking hills on either side. This is a stretch of poor country, numerous cabbage-trees with attenuated stems standing up in the fast-waning light,

more like the thin poles of immature lance-woods than anything else—entirely unlike the sturdy-looking cordylines of the south. Akerawa siding passed, we next reach Towai, where a rush is made for a cup of tea. It is, however, not a refreshment station, and as the house where the tea is procurable is a good few yards away and the train stops for only a few minutes, there is some risk of not getting back to the carriages in time unless you are amongst those who are fortunate enough to be first served. Our little party are not among the fortunate ones, and a warning "All aboard!" causes a hasty laying down of cups and a dash for the train. We shortly afterwards reach Marowaku station, the meeting-place of the Russell and Whangarei trains, the surrounding ridges showing green beside flankings of manuka and bracken. At 5.30 the sun disappeared in the west, but there was nothing in the shape of an attractive sunset sky. The carriage lamps were lighted and as nothing more of the country was to be seen, I settled down to a quiet read of Colonel Quaritch, V.C., not, however, before seeing a dim vista of tall raupo swamp, with blackened tree trunks here and there standing up grim and spectre-like in the evening light.

We had a long wait at a small station—Opahi—and as the shadows lengthened and the darkness deepened the time passed without weariness as I turned over page after page of Rider Haggard's critical analysis of the characteristics of Edward Cossey and the passionate regard for him of beautiful Belle Quest. But the wait came to an end with the finish of the shunting that had been proceeding since the train stopped, and with a shriek from the engine we proceeded on our way.

I cannot tell my readers anything about the country we passed through in the darkness until Kawakawa, in the Bay of Islands County, was reached. Our car was removed from the truck which conveyed it to Kawakawa, and was carefully looked over and put under cover until morning. We started immediately after breakfast, our objective for the day being Kaitia, a rising town in



NEAR CAPE MARIA VAN DIEMEN.

Mangonui County, and probably destined to become a large and important centre. Our route lay by way of Ohaeawai, in the Bay of Islands County, through Waimate North, Kerikeri, Waipapa, on to Kaeo—the latter within easy distance of the terminal reaches of Whangaroa Harbour—thence on to our destination, Kaitia. The day's drive proved most interesting, and as we passed the upper waters of Whangaroa Harbour the tragic story of the Boyd, with the destruction of all on board was recalled. It has been many times told, but as it may be new to many of the readers of this short narrative of a tour in the northern regions, of which Whangaroa is a most interesting section, a short account of the terrible massacre may be given.

The Boyd Massacre, 1810.

In a dispatch from Governor Macquarie to Viscount Castlereagh dated Sydney, 12th March, 1810, an account of the massacre of the Boyd's crew is given at some length. From this account it appeared that the Boyd had come to Sydney with convicts from Ireland towards the end of 1809. She was returning to England by way of New Zealand, with the intention of shipping some spars and timber, and had a cargo of fur skins and oil. According to official reports afterwards made to Governor Macquarie by a commissioner appointed for the purpose, when the Boyd left Sydney she had on board four or five New Zealanders, who made part of her crew. They were displeased at their treatment on the passage, and determined on revenge. On their arrival they complained to their friends and relatives at Whangaroa, and the design of taking the ship was formed in consequence. The captain was prevailed on to leave the vessel, accompanied by his chief officer and three boats manned in order to procure the spars he required. The boats were conducted to a river out of sight of the ship, and Captain Thompson was invited to land and mark the spars he wanted, the crew following to assist in the work. The tide was ebbing, and the party was led through the forest until the water had receded sufficiently to leave the boats high and dry. The

Natives who had been on the ship as part of the crew then threw off the mask and upbraided Captain Thompson for their maltreatment, and almost immediately the captain and his crew were assaulted with clubs and axes, and all were prostrated before they had time to defend themselves. Every one of them was killed on the spot, and their bodies afterwards devoured by the Natives. In the dusk of the evening the Natives launched the boats, and rowed to the ship. They got on board and the second officer was knocked down and killed. The seamen of the watch were in like manner surprised and killed. Some of the murderers then went down to the cabin and asked those who were there to go on deck, a female passenger being killed on the cabin ladder. The rest of those below were killed as they went up, with the exception of four or five who ran up the shrouds and remained in the rigging the rest of the night. These unhappy creatures afterwards got on shore, but were all killed. A woman passenger and two children, who were afterwards found in the cabin, were spared from the massacre and afterwards taken on shore to a hut where they were afterwards found and rescued. The ship was afterwards burned to the water's edge. There were many conflicting accounts of this historic massacre, but the foregoing probably gives as accurate an account of the tragedy as could be obtained at the time. Fuller details are to be found in the first volume of Mr Robert M'Nab's "Historical Records of New Zealand."

At Kaitaia, thence to Ahipara and 90-Mile Beach.

Having for the whole of the day been traversing an interesting part of the far north, we reached Kaitaia about 6 p.m., and found that the local manager of the North Auckland Farmers' Co-operative Limited, Mr Morpeth, to whom we had a letter of introduction, had procured excellent accommodation for us in a well-conducted boarding-house. The town was unusually busy, owing to a visit that was being paid to it by Mr M'Donald, the Public Trustee, accompanied by a former holder of the posi-

tion, Dr Fitchett, C.M.G. These gentlemen were paying their first visit to the Far North, and were the guests of the townspeople at a banquet, to which Dr Fenwick and I were invited. It was a highly successful affair, presided over by Colonel Allan Bell, and Mr M'Donald and Dr Fitchett availed themselves in the course of interesting speeches of the opportunity afforded them of indicating the advantages of the great institution of which Mr M'Donald is the executive head. Many other speeches were delivered, and the chairman took full advantage of the opportunity afforded him to eulogise in glowing and felicitous terms the splendid district of which Kaitaia is the centre, and especially dilated on the potentialities of the 30,000-acre swamp area that lies close to the town and is being scientifically drained by the Government.

Next morning we were up at six o'clock, breakfasted at 6.30, and started on this interesting section of our tour at seven. Following the instructions given to us on the preceding evening, we turned sharply from the main street to the road leading to Ahipara, where the land was left and entrance made to the Ninety-mile Beach—wrongly so named for its stretch is 60 miles. At Ahipara we were promptly met by Mr Wilson, who, in addition to being the school teacher of the district, also holds the position of post and telegraph officer. We found him a courteous and obliging gentleman, who greatly facilitated our progress by piloting us through a Government reserve, heavily overgrown with gorse, to the mouth of a stream on its northern side, thus saving us the necessity of having to cross the sandy mouth, for it debouched on the beach. Having said good-bye to our courteous guide, the car was shaped for the edge of the breakers and turned to the northward for a non-stop run of 60 miles. We had been carefully warned that on no account must we come to a stop, or we would almost certainly be involved in trouble by the tyres sinking, for solid as the surface apparently is on this magnificent beach it is not sufficiently so to prevent a stationary car from breaking through and becoming immoveable.

A Stirring Beach Ride—60 Miles in an Hour and a-half.

Fully alive to the risk involved, our capable chauffeur, hat and coat discarded, a warm cardigan jacket his outer garment, settled down to his work. I feel that I shall be at a loss for words to describe that memorable and exhilarating spin. It was to be done at high speed, and as our trusty Dodge raced along the shore, edged by the white breakers with their curling tops, speed was accelerated to 35 miles per hour, then we settled down to 40 miles, with an occasional increase to 42 for a few moments. The average speed maintained for the whole distance was not under 40 miles per hour. As we raced along vivid interest was centred in the numerous gatherings of sea-birds settled on the beach. Seagulls, terns, toreas (the oyster-catcher—a handsome, black-backed bird with a red bill and red legs)—rose in whirling bands and scattered to left and right as we approached them. Many times they narrowly missed hitting our wind-screen, which had been kept open on the advice of those who had known of wind-screens being smashed through the gulls failing to realise the speed at which an approaching car was travelling. But there was also on occasions a tragedy in bird life, for the death of the gull or the tern had followed on the impact. Mr West Hill, the manager of Te Paki Station, informed us that this occurs when the car is facing a strong wind, and he has himself witnessed in the same trip the deaths of a number of birds through their inability to get into rapid flight before the car is on them as they rise from the beach. As minute after minute sped, and minutes merged into quarter-hours, and quarter-hours into half-hours, the interest and pleasurable excitement deepened. We had entered the beach at 8 a.m., and at 8.30 we had run 20 miles, at 9 o'clock 40 miles; but the run was so smooth that we hardly realised, any more than did the birds we sent scattering to right and left as we sped onward, the speed at which we were travelling. We kept the sandhills on the shore line from a chain to a chain and a-half distant, had an occasional



GROUP AT TE PAKI STATION.



ON THE WAY FROM TE PAKI TO THE BEACH.

splash into the backward flow of a spent wave or into the little rivulets sent down by a small creek. Ever in view was our goal, the bold promontory of Scott's Point, while gulls and terns and toreas and dotterels, in endless little assemblages, with now and then a few godwits to add interest to the bird life, escaped with difficulty from the flying car as it disturbed their peaceful operations in the sands of their far-away resort. A most interesting feature in the sand-hills skirting the beach was the great number of ancient shell heaps that shone white and clear in the morning sun, many of them rising to a height of eight or ten feet, and curiously enough remaining uncovered by the drifting sand. They were perhaps most prominent towards the Ahipara end of the beach, some of them showing up almost like the end of a house painted white and observable for a mile or two before we reached them. There is probably no other beach line in New Zealand where such countless millions of shells, gathered together in middens and piled-up heaps, can be seen. They are the tokens of great feasts of the Maoris in the days of ages past, long before the pakeha had reached New Zealand, days when the native population of this far northland must have been very great.

At Te Paki—the Most Northerly Station in New Zealand.

After a magnificent run of an hour and a-half the 60 miles of beach were traversed and Scott's Point reached. Here the car was turned back, as we had over-run our distance by a few miles. We were met at the mouth of a sandy-bottomed creek by a messenger from Te Paki station, and conducted up the wide bed of the creek and over some scrub-covered country to the homestead, where a most cordial welcome was given to us by the owner, Mr R. Keene, of Wellington, and the manager and his wife, Mr and Mrs West Hill.

As our stay was to be limited, no time was lost in visiting the interesting spots of the district. Immediately after lunch, three horses were saddled, for Mr Keene, my son,

and myself. My own mount was a little, dark, undersized, and rather shaggy animal, whose endurance and sure-footedness were vouched for. We left for the purpose of visiting an old Maori pa on the summit of Karanake, a scrub-clad hill 1004 feet high. It proved to be a stiff climb for our horses, but they are used to that sort of thing, and with Mr Keene leading we made steady progress through bracken and titri and other scrub. The summit reached, we examined the site of the pa. Little remained beyond the deep encircling foss, now overgrown with secondary native scrub and pongas. Evidently it had been a fortress of great strength. But of even greater interest to us than this memorial of byegone years was the magnificent view of Spirits Bay, probably four or five miles distant as the crow flies, but from our elevated position seeming to be very much less. Away to the right stretched Tom Bowling Beach, 15 miles out to sea from the latter being the locality where the Wolf laid the mines from which the s.s. Wimmera met her fate. Spirits Bay is one of the spots where the godwits make their home during their annual visit to New Zealand and whence they take their departure for far distant Siberia, from which they make their extraordinary journey to New Zealand shores. At the time of our visit the flight of the godwits had already taken place.

We spent a little while on the summit of this interesting hill, Mr Keene pointing out to us features in the surrounding country, and the view embracing the coast line on either side of the island. We had a little difficulty in pushing through a quantity of scrub and trees in the endeavour to get on to a fresh track for our descent, but finally decided to return by the track we had taken before, and in due time reached the home-
stead.

Troubles of an Oil Launch at Parengarenga.

On the following day the party rode eastward on the landing on the Waitiki Stream, and ran down the stream by launch to Parenga Harbour. A heavy westerly breeze was increasing in force, and a nasty joggle on

the harbour waters prevented any exploration of the various settlements around Par-enga. An hour was spent inspecting the accumulation of kauri gum at the store of Mr Keene, jun., and then, in view of the increasing severity of the wind, it was deemed wise to make for home. A heavier launch towed the smaller boat to the point where the Waitiki debouches in to the harbour, and here the party embarked once more on the small launch. Darkness was now gathering, heavy rain had begun to fall, and to add to the general discomfort, engine trouble delayed the return by hours. Eventually a hail from the darkness informed us that we were opposite the landing; Mr Hill, uneasy over the prolonged absence of the party had dispatched a cadet to meet and guide them.

Our Objectives, Te Reinga and Cape Maria van Diemen.

Capes Reinga and Maria van Diemen were visited on the following day. An early start was made and after a prolonged ride of 10 or 15 miles, much of it over high bluffs and deep ravines, the party rode down a grassy vale along the banks of a crystal stream, to a beach—Taputaputa—that astonished us by its beauty in a province renowned for its beautiful beaches. Fifty years ago an adventurous pioneer settler built his home here, and the old, deserted house still stands, and near by pleasant grassy slopes planted with exotic shrubs and some ancient pear trees, which had been recently visited by some Maoris, who had gathered most of the pears. No halt was made, but the horses' heads were turned to the steep bluffs to the westward, and after an hour's struggling climb the horses stood on the extreme point of Cape Reinga, and the travellers enjoyed from their altitude a panorama of rare beauty. We had reached one of the great objectives of our tour—the extreme north-western point of New Zealand—that historical promontory from which, according to Maori tradition, the spirits of their departed ancestors left the body and entered on the mysterious life of another world. We felt

arising within us a wave of feeling allied to that which animated the untutored savage of bye-gone years, and as we dismounted from our horses after riding down the sharp and narrow declivity that must be traversed ere the extreme point of Te Reinga promontory is reached, we settled down for a quiet rest in the grateful warmth produced by a northern sun and discussed the details of our long ride to this lonely spot.

It will be interesting to many of my readers to learn something about the traditions associated with the land and ocean spaces of the Reinga, and I copy the following account of those traditions from a paper by Mr T. F. Cheeseman on the flora of the North Cape district read by him before the Auckland Institute, 5th October, 1896:—

Most of us are aware that the Maoris believed that immediately after death the soul made its way to the extreme north of the country and descended into its future abode beneath the earth at a place called Reinga. So implicit was their belief in this tradition that they asserted it was quite possible to hear at night the sounds made by the spirits passing through the air on their northward journey, and that this was especially the case after a great battle, when multitudes were slain. In such instances they became aware of the event long before the news could reach them by ordinary means. Persons who had been so seriously unwell that their lives were despaired of, but who recovered, were said to have been at the brink of the Reinga, but to have returned. They even have traditions of people who had died, and descended to Reinga, but who nevertheless returned to earth and life and related what they had seen. A belief so widespread and so generally accepted invested the locality with a particular sanctity in the eyes of a Maori, and hence in the early days of the colony the visits of Europeans were regarded with dislike. So far as I can ascertain, the first European who actually reached the Reinga was the Rev. W. G. Puckey, who journeyed thither from Kaitaia in 1834. An account of his visit is given in the *Missionary Register* for 1835. In 1839, the Rev. Mr Matthews and Mr W. R. Wade followed in his foot-

steps. An interesting notice of their journey is also given in the Missionary Register, and, as that publication is not now generally accessible, I will give a few extracts from it. "It became dark before we reached the village adjacent to the Reinga (Werahi). At first we could not find a single individual in the place, till we discovered three men crouched in a dark corner. We shook hands with two of them; the third was Wareware, a chief of some importance, and father of Te Morenga. On Mr Matthews holding out his hand the old man drew back with a peculiar growl of displeasure, demanding what business we had there, telling us we had better be off, and adding, 'Spear me! kill me!' meaning that if we did so it would scarcely be a greater offence. This is the last village at this extremity of the island, and the only one, except Kahokawa, within many miles of the Reinga, the fabled departing-place of the New Zealanders." On the next morning, "leaving two of our lads in charge of the tents, about 8 a.m. we commenced our journey to the Reinga. After the first ascent the road ran along the very edge of a tremendous rocky precipice; and in one sharp ascent the grass was so slippery that it was difficult to keep one's feet. The descent to the rocks of the Reinga was rather better than the ascent. This brought us down to a little rill of water, called Wairatane, or Waioterata. The kehuas, or spirits, travel, it is said, along the road which we had passed. At one place, near Kahokawa, they stop for a parting look, and a long farewell to the land of their fathers. Other spots on the road are marked by wakaau, or tokens, to denote the resting places of the wearied spirits. These are little bundles of rush tied in a loose knot; a green bundle, of course, indicating a recent death, as each spirit, in passing, leaves his wakaau. On arriving at the Wairatane, some kehuas make a stop here, and then return. An old spirit stands waiting at the opposite side of the river with a stick or plank in his hand, which, on the arrival of a new-comer, he appears to lay down as a bridge. Sometimes his offer is rejected. 'No,' says the newly-arrived, 'I mean to go back again.' The case meant by this emblem is that of a native who has been, as we say, at death's door, and has recovered. Sometimes the friends of the individual who has so recov-

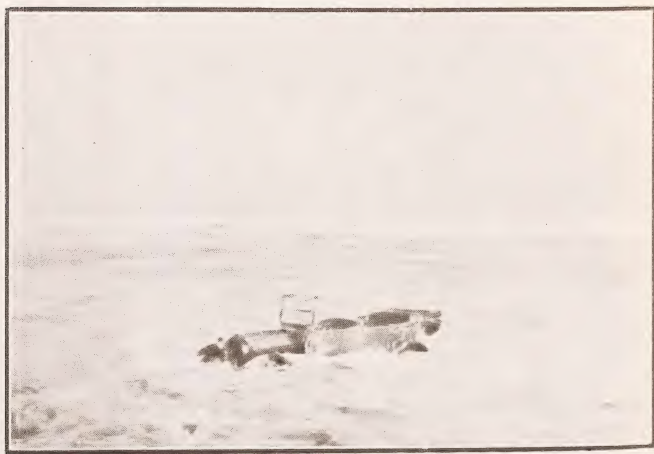
ered ask him, 'No hea koe?' (whence have you come?) He replies, 'No te Waioterata' (from the Waioterata). But once past the stream there is no return from the dreary region beyond. The opposite is, with them, the bourne from which no traveller returns. From the Wairatane the spirits of the deceased glide along the rocks till they come to a perforated rock, where, passing through a small hole, they then ascend to the peaks of those projecting rocks to which more properly belongs the name of Reinga—wild rocks running out to sea. From peak to peak the spirits again descend—where none but spirits could—till they arrive at the projecting branch of a pohutukawa tree (*Metrosideros tomentosa*). Why this is called the Aka of Reinga I could not ascertain. In this branch the spirits hang for a while, taking their final earthly rest. The branch is bent downwards in consequence, it is said, of the number killed in Hongi's wars, whose spirits crowded together upon it. Thence they drop on to the flat rocks below and pass out to the extreme point—which might fairly be called 'the land's end'—there plunging into the deep. A hole beneath the mass of floating seaweed, the entrance to the unseen world, finally receives them."

Mounting our horses we climbed the steep slope we had descended, and after the horses had scrambled down a precipitous bluff, we emerged on a sandy beach leading to Cape Maria van Diemen. Opposite the Cape, on an island half a-mile from the shore, stands the lighthouse, whose intermittent gleam warns passing ships to keep well out to sea if they wish to avoid disaster on the treacherous sandbank on which the waves were breaking for miles at the time of our visit.

As the afternoon was rapidly passing, and as our cadet guide had not been on this part of the run before, we decided not to spend time in reaching the end of the cape, and we turned our horses inland to the south-east to make for the homestead. At this point the track was missed. Many hours passed, and night had fallen before we extricated ourselves from the mazes of the Te Werahi swamp, and reached the homestead.



THE CAR GETS INTO TROUBLE.



CAR AT FULL TIDE.

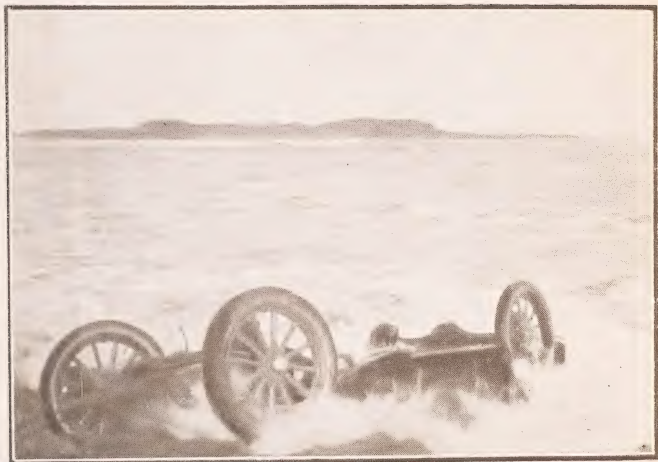
Farewell to Te Paki—90-Mile Beach Again.

A Thrilling Moment, and—Disaster.

On Sunday, April 23, the party bade good-bye to their hosts. It was not possible to express in adequate words their deep gratitude to Mr Keene and Mr and Mrs West Hill for the extraordinary courtesy and kindness with which they had been overwhelmed. The car ran down the sandy bed of the creek and emerged on the Ninety-mile Beach for the run home. A steady 35 to 40-mile pace was made, and elated with their successful visit to the northern-most points of New Zealand the party settled down to the enjoyment of the wonderful beach run. Disaster overtook us with extraordinary swiftness. Twenty miles south of Te Paki a rocky point, washed by the half-tide, juts out on to the beach; a sandy spit connects this point with Mangonui Bluff, a surf-swept piece of grass-clad land surrounded on three sides by sea. From the rocky point a salt-water channel, gouged out by the recent gales, invisible to those in the approaching car, runs to the sea. As the car raced through the channel the water rose to the magneto and the engine stopped. Two successive incoming waves washed over her, receded, and left her sinking in the sand. Within a few minutes she was immovable. No timber was available to chock her up, and no means of haulage was procurable in that lonely spot. In a few hours the rising tide, augmented by the westerly gale, submerged the car, overturned her, and threw her on to the rocks, and during the night the force of the gale hammered her to pieces.

The party settled down to bivouac for the night under some friendly flax. We accepted the position with equanimity, realising, however, that it would probably be many hours before assistance reached us, and that it must be sought for, as no one could be aware of our plight. We despatched Williams to search for the nearest habitation, not knowing how far he would have to go, but considering it quite possible he might have a ten miles tramp before

any settler's house was reached. He left our bivouac about 2 p.m., and my son and I at once set to work to collect driftwood with which to build up a good fire. We were successful in securing a fair quantity, which we carried to our camping ground, and before sundown we considered we had enough to keep a fire going all night. We built up the pile in good style, and with the aid of a bundle of flax sticks and other dry material, we soon had a cheerful blaze. The billy was then boiled, tea made, and with the help of provisions we had carried with us in the car, we made an excellent meal. At 8 o'clock I settled down for the night under shelter of the flax bushes, but had scarcely done so when a call near by made us realise that help was at hand. It turned out to be Williams, who had succeeded in finding the home of Mr A. H. Watt, about five miles distant from where we were located. Mr Watt, on being informed of what had happened, immediately set to work to render help. Horses were saddled, and with Williams, he arrived at our camp at 8 o'clock with a tent fly, some rugs, and provisions. After an hour's talk by our blazing fire, we all settled down for such sleep as we might be able to get. My son's sleeping valise had last done duty in the desert campaign of Sinai, and here again it was brought into use in a sandy waste, with, however, the friendly flax that the Sinai desert could not boast. The cheerful blaze of our driftwood fire was appreciated by all of us, for of sleep there was none. At midnight a loud hail reached our ears, and this proved to be from two Maori station hands from Te Paki. Mr Hill had been informed through Mr Watt's telephone of our plight, and a pair-horse buggy was despatched from the station, with a thin wire cable and ropes, in case a rescue of the car might be feasible, and in a letter from Mr Hill the use of a bullock team was proffered. The extrication of the car was, however impossible from the first. The Maoris tied up their horses, curled themselves up in their rugs, and were soon oblivious of their surroundings. About 1 a.m. a motor car from Kaitata arrived. This had been telephoned for by Williams from Mr Watt's place.



CAR OVERTURNED AND THROWN ON THE ROCKS.



A LAST LOOK AT THE DERELICT.

We were up betimes, and vigorous salvaging work on the car resulted in many valuable parts being saved. She was fixed hard and fast in the rocks, the waves having turned her completely over, but tyres, magneto, accumulators, and other valuable accessories were got out of her. The tyres, along with our personal effects, were loaded on the car from Kaitaia, the other parts being left in charge of Mr Watt, and about 2 p.m. we left the scene of the disaster for our drive along the remainder of the beach to Ahipara, and then to Kaitaia, which we reached just before five o'clock, in time to permit of the dispatch of some press and other telegrams giving a short account of what had occurred.

Kaitaia to Whangarei, via Mangonui and Kawakawa..

Here we had a good dinner at the hotel, and were fortunate enough to meet three gentlemen who were endeavouring to arrange for a touring car to make the long journey from Kaitaia to Whangarei to catch the Manaia for Auckland. We joined forces, and started on our journey about 7 p.m., the party having been further increased by the addition of a young lady who is attached to the staff of the Northlander, a newspaper at Kaitaia. It was intended to proceed no further than Mangonui that night, and we pulled up at that pleasant little township on the shore of the upper reaches of Mangonui Harbour at 8 p.m. Here we found two old Otago residents—Mr Thompson, a son of the late Mr John Thompson, of Lawrence, and Mr W. Henderson, solicitor, formerly of Gore. We had excellent accommodation for the night at Mr Thompson's commodious and well-appointed hotel, and, after an early breakfast, made a start at 8.30 on our long drive to Whangarei, which we expected to reach about 6 p.m., two hours before the Manaia's departure from Onerahi. We had for some time after our start from Mangonui an interesting drive along causeways built by the side of the Whangaroa waters, skirted by stretches of mangrove swamp, some of the trees being 15 or 18 feet high. Passing on, we reached the little township of Kaeo, one of

the most ancient of the settlements in these northern regions and the spot which tradition ascribes as the site of the cannibal feast the victims of the Boyd massacre provided.

After a halt for a few minutes for some tea and light refreshments, we resumed our journey, the next small township we passed being Waipapa. Here we saw a number of buildings used in connection with the cleaning and preparation of kauri gum procured in the neighbourhood. We had met with gumfields almost everywhere in our travels, extending even to places so far north as Parengarenga. At Ahipara a company has been formed to work the gum deposits, and improved machinery will shortly be at work which it is claimed will transform the deposits in their unpromising looking natural state into pure gum. The process is the washing out of the impurities, and samples that we inspected indicated that a valuable machine for the purpose had been evolved. The extent of the old kauri forests must have been extraordinary and their destruction ages ago is a subject of profound interest.

We passed through Waimate North, with its stretches of fine country, and on to Ohaeawai, where we stopped for lunch. Just as we came out of Ohaeawai we passed the old house of Mr T. C. Williams, with its beautifully timbered, park-like meadows, the fine old oaks and other English trees forming a marked contrast to the country through which we had passed. From here to Kawakawa was a short run of 10 to 12 miles. Up to that point the roads had been excellent, and there had been but little rain. But we were soon to experience a very different state of affairs. Rain showers became frequent, and all reports that reached us agreed that the main road was absolutely impassable for motor traffic. We were advised to diverge to a route to the right, a mile after leaving Kawakawa, known as the Ruapekapeka route. This was a clay road, and the chains were fitted on to the tyres. On the long pull up the clay road of the steep hill, a distance of six miles or so, the desperate struggles of the car to keep anything like a straight course were

unavailing, and we skidded about from side to side, with the water-table on the left and a bracken and scrub-clad declivity on the right. Every now and again the tyres got into the water-table, and a general disembarkation had to be made into the sticky clay and quantities of scrub cut before the car could be extricated.

Perilously Near Disaster.

Rain showers became very frequent, some of them very heavy, and the climax was reached as we approached the summit, when the car skidded badly to the right, and a few inches of soft clay alone saved us from going over the bank. We made as rapid an exit from the car as we possibly could, the young lady passenger whom we were taking as far as Hikurangi being our first care in this grave emergency. She was got out with precipitancy over the side of the car as the baggage, which was strapped to the side, prevented the door being opened, and one after another we followed in an undignified scramble, all landing safely in the mud. Fortunately the car held its position, the gear was put in reverse, and the car cautiously withdrawn from its perilous position; we then had a long run down a greasy slope for several miles without any special difficulty, and were at the foot met by a horseman who warned us that shortly ahead lay a bog hole that made the main road impassable. Under his guidance we entered the manuka scrub to the right of us, and had barely done so when we came upon another car that had run into an extension of the bog on the main road. This car was extricated, and we followed in its wake and got through with a struggle. With the exception of a puncture we had no further trouble, and reached Whangarei about half-past 9, an hour and a-half after the Manaia had sailed for Auckland. Thus was the object of our special journey over these desperate roads frustrated. There was, however, some compensation in entering the well-lighted and comfortable quarters of the Commercial Hotel, where a good supper and a comfortable bed awaited us.

Whangarei to Dargaville and Helensville, thence to Auckland.

Having missed our steamer, we now had to decide whether we should wait at Whangarei for her next trip, or return to Auckland by some other route, and we decided on the latter. Our route was to be to Dargaville by special motor, thence to Helensville by the Kaipara Steamship Company's s.s. Wairoa, and from Helensville to Auckland by train.

The Whangarei-Dargaville run was without incident. A powerful four-cylinder American car had been procured, and we ran out of Whangarei at a good pace, passing the hospital in its commanding position on our left; and here it may be said that the North Auckland people are not only lavish in their hospitality to the passing guest, but are deeply appreciative of any slight return from the friends they entertain; hardly a Whangarei resident we met but impressed upon us the substantial and unostentatious help afforded to their hospital by the commercial travellers of the north.

Bad reports had come through as to the condition of the main road, and at Maungatapere we diverged to the north, passing in our circuit through Poroti, Titoki, and Houto, a district of rich grazing slopes; on the whole this road was fair, but the recent heavy rains and neglect of the culverts had left a few deep mudholes in the dips. Chains were put on, and the car worked her way through without special difficulty; later we heard that two or three cars that had held to the main road had been held up, and were still in trouble. Once past these few difficult miles and arrived at Kirokopuni, good metalled road ran along the Wairoa to the rich Dargaville flats. Hardly were we in Dargaville before the almost embarrassing hospitality of the north was encountered. The houses of casual acquaintances were at our disposal; bed-rooms were ready for us—why not spend a few days before hurrying back to the wintry south? We compromised; we could not stay, but we promised our hosts in all sincerity that we would make an effort to return ere long.



BIVOUAC IN THE SANDHILLS.



ANOTHER GROUP AT TE PAKI STATION.

and complete the tour so rudely interrupted by the disaster to our car. On this understanding we embarked that evening on the Wairoa and ran smoothly down to Helensville, passing deserted wharves, where once scores of schooners lay waiting their turn to load the precious kauri. All were tired after the long run in the fresh air, and quickly found sleep in the comfortable deck cabins of the Wairoa; perhaps, before sleep overtook us, some of us had a vision of the future not so far distant—when these crumbling wharves would again be crowded, not with schooners feeding on the quick destruction of the kauri forests, but with liners loading the steadily increasing product of the dairy herds of this rich district.







